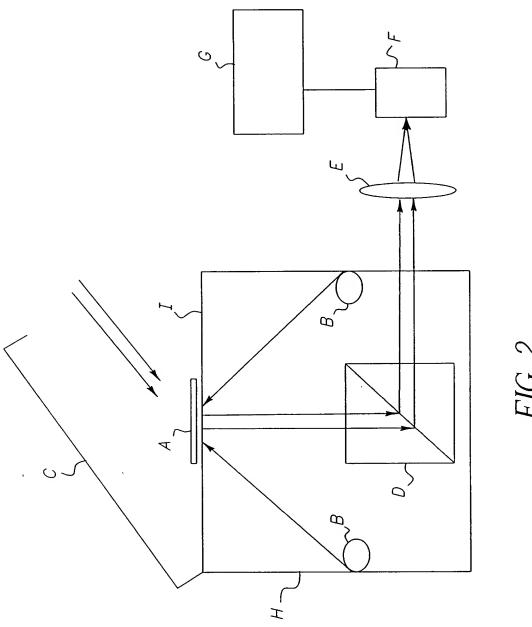


TITLE: RANDOM ARRAY OF MICRO-SPHERES FOR THE ANALYSIS OF NUCLEIC ACID USING ENZYME DIGESTION
INVENTOR: Qiao. et al., USSN: 10/098,642O, Docket number: 84027WFN



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STEP 1. HYBRIDIZATION OF CHEMILUMINESCENTLY/-FLUORESCENTLY LABELED NUCLEIC ACID SAMPLE ONTO THE MICROSPHERE COATED MICROARRAY

110

STEP 2. REMOVAL OF NON-SPECIFICALLY BOUND CHEMILUMINESCENTLY /FLUORESCENTLY LABELED NUCLEIC ACID BY WASHING THE MICROARRAY IN BUFFER SOLUTION.

120

STEP 3. WHOLE FRAME IMAGING CAPTURE OF CHEMILUMINESCENTLY/FLUORESCENTLY IMAGE RESULTED FROM THE HYBRIDIZATION INTERACTION OF UNKNOWN NUCLEIC ACID SEQUENCES WITH PROBE SEQUENCES (IMAGE1)

130

STEP 4. WHOLE FRAME IMAGING CAPTURE OF THE MICROARRAY UNDER BRIGHT FIELD ILLUMINATION TO OBTAIN MICROSPHERE COLOR SIGNATURE/BARCODE IMAGE (IMAGE2).

140

STEP 5. IDENTIFICATION OF UNKNOWN NUCLEIC ACID IN THE SAMPLE SOLUTION BY COMPUTER ANALYSIS OF IMAGE1 AND IMAGE2 USING PATTERN RECOGNITION ALGORITHM.

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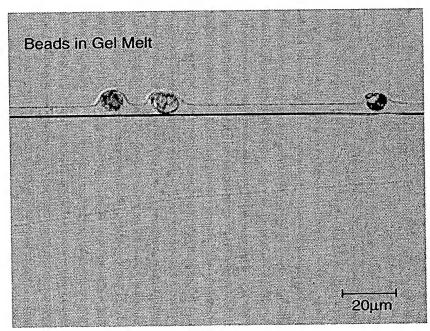


Fig. 4A

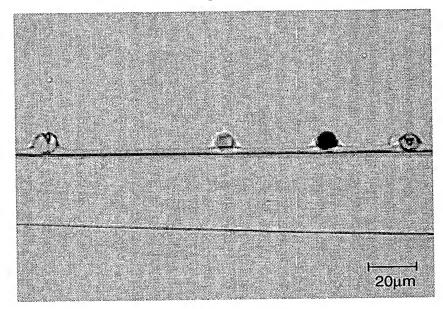


Fig. 4B

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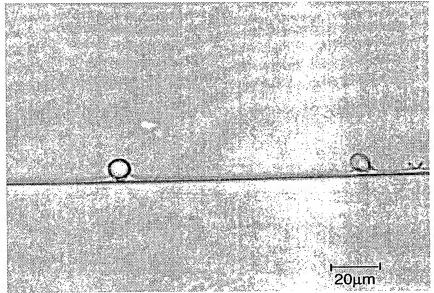


Fig. 4C

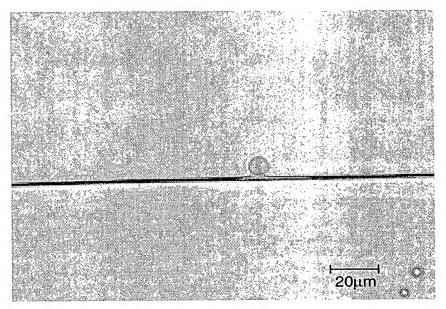
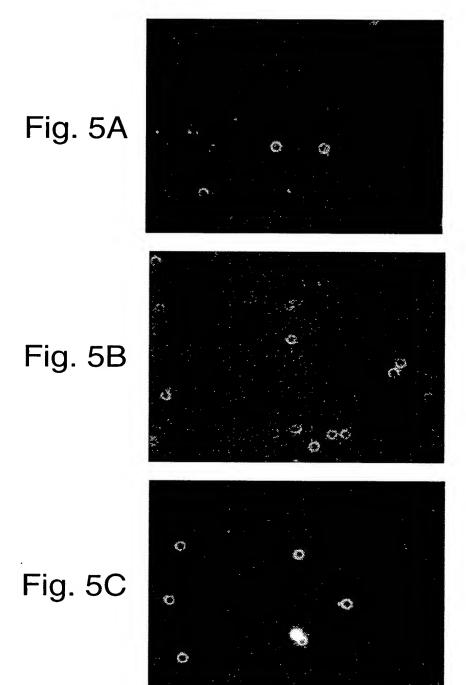
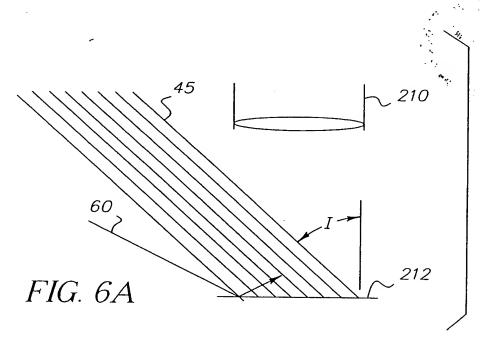


Fig. 4D

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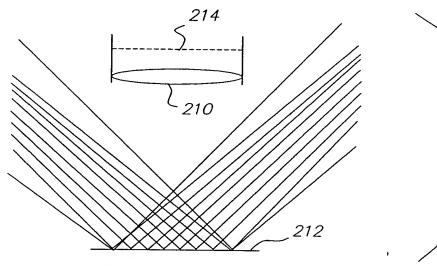


FIG. 6B

